

# **Strategies for International Excellence of European Universities : From UPMC to La Sorbonne University 10 years of reforms**

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**Universidad Carlos III de Madrid, Getafe Campus**



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Immediate former president of UPMC**

**UPMC's vice president for international affairs**

**General delegate of Paris Universitas**

# **2000 : At the beginning of the 21st century UPMC in Nervous Breakdown !**

**A drop in the number of scientific students :**

**a decrease by 5 000 in ten Years**

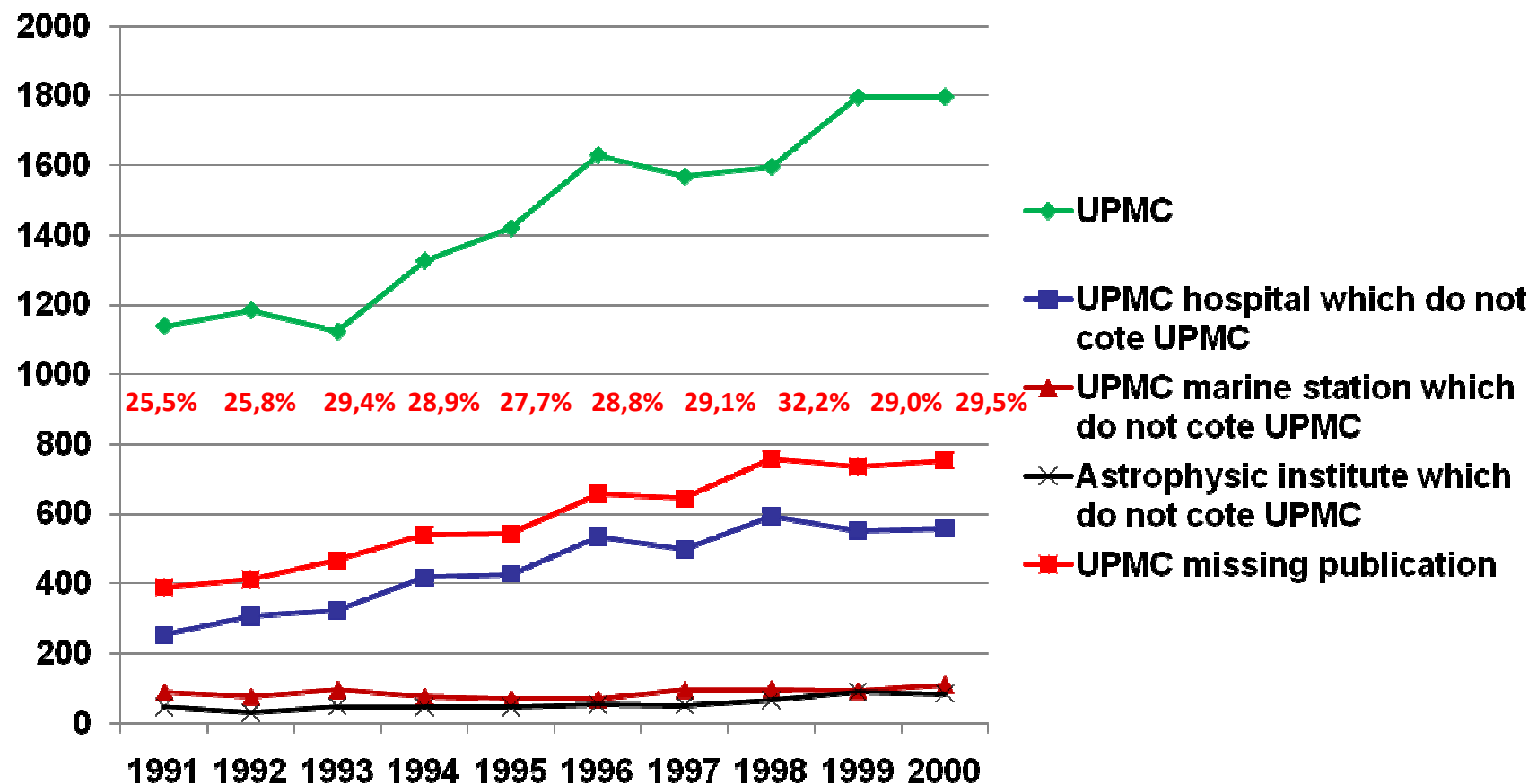
**One third of English-language articles did not mention the UPMC**

**A stagnant budget**

**Heavy threats on the main campus Jussieu**

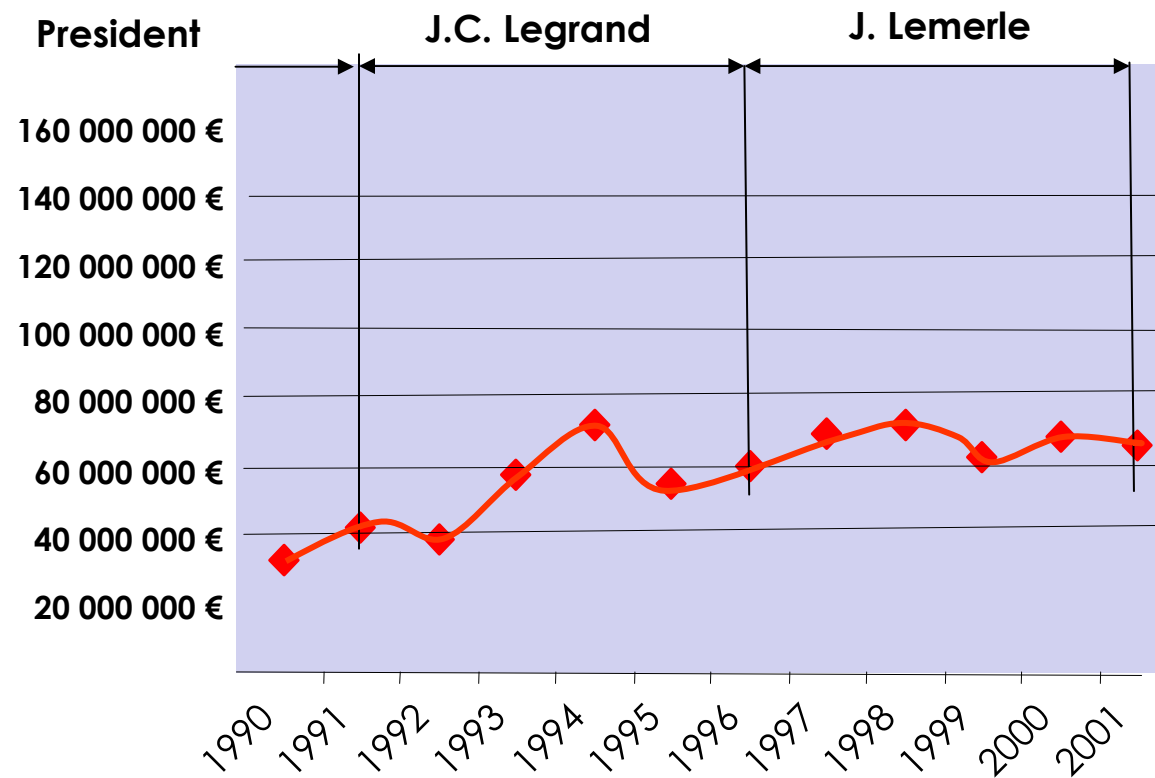
**A very fragmented university**

# Scientific papers in English language



# UPMC annual budget

(Without salaries)





**To La Villette in  
the suburbs**

**1999 : Court decision**

**All asbestos must be removed  
from the Jussieu campus in 2009**

**2002 : Proposal of the FR Senate :  
the UPMC must be relocated**

**From the main Campus : Jussieu**

# **The 2000 figures**

**180 research laboratories of various sizes (10 to 300 researchers)**

**19 institutions of training and research :**

**No rules for doctoral studies**

**Three different medical curricula, difficulties for students to move between the different hospitals**

**227 degrees in science**

**6 2-y university degree,**

**28 1-y bachelor's degree**





**49 1-y "master's degree"**

**144 1-y Diploma in Higher Applied Studies (DEA, DESS)**

**600 centers of fiscal responsibility**

## **Last quarter 2000**

**Important debate within the university to elect the next president**

-  **Future of the main campus and then of the university itself**
-  **Organization of the main training and research activities of the university**
-  **Governance and management of the university**
-  **Academic life during the renovation of the campus**

## **January 29, 2001**

**The assembly of the university had to choose between two candidates**



**One advocated a strong presidency and a radical reform in all areas : me**








**The second advocated a supervision of the university by the college of the deans of faculties and schools**

**I was elected by 79 votes to 36 against my opponent  
11 blanks, 12 members were absent**

**I took office March 3, 2001**



## 2001-2002 : action and a four-year plan

-  Establishment of the presidential team & new governance
-  Planning of renovation work of the Jussieu campus
-  Structuring research, innovation and doctoral programs
-  **Setting up of a Department of International Affairs**
-  **Seminars on the reform of the training offer**

## Alongside the statutory bodies, establishment of a temporary organization of the presidency

- **Board of regents of the University**
- **Scientific Council of the University**
- **Board of studies and academic life**

- **Vice president for the scientific sector**
- **Vice president for the medical sector**
- **General secretariat of the University**
- **Accounting officer of the university**

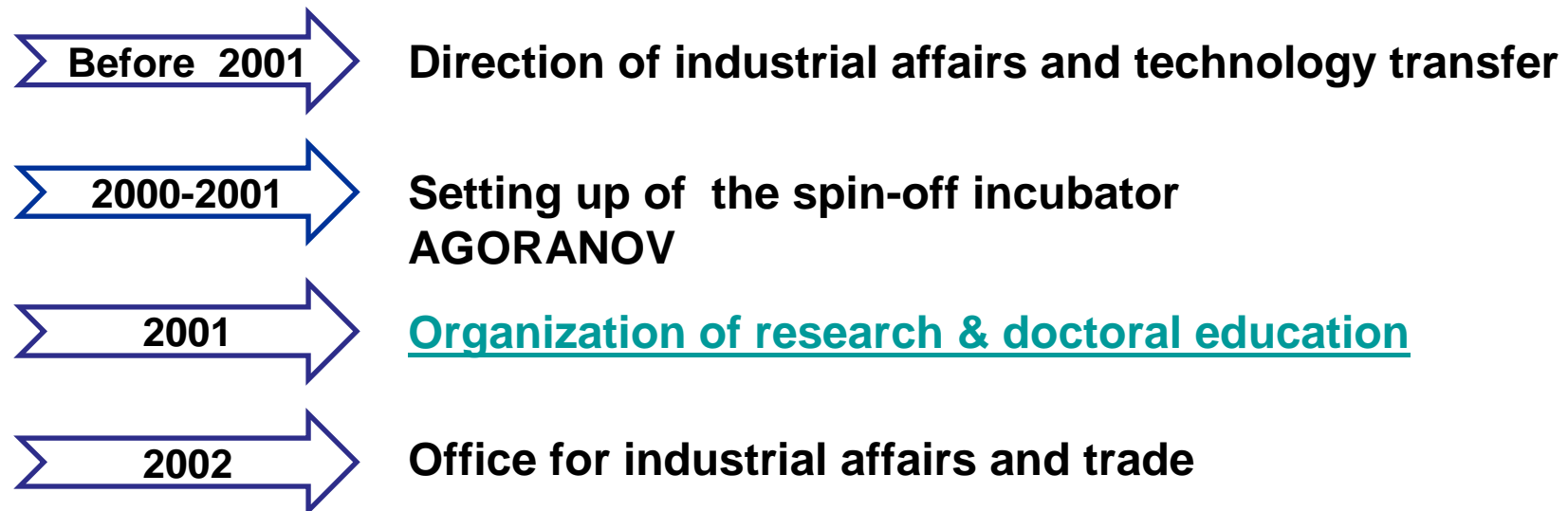
- **Presidential team**
  - cabinet secretary in charge of communication and coordination
  - Special assistant for the budget, the construction work and human resources (also VP of the university and of the scientific sector)
  - Special assistant for education
  - Special assistant for research
  - Special assistant for the new technologies of communication and information
- **Presidential board for research**
- **Presidential board for education**

Half the campus had to be closed, we were obliged to temporarily relocate the laboratories from the campus in other parts of Paris

We decided to refuse the transfer of the campus outside Paris and to keep first year students on the Jussieu campus



## 2001-2002 : Structuring research, innovation and doctoral programs



## Research and doctoral training : 161 labs & 11 federative institutes

### 4 main research domains lead by the presidential research board

#### Modeling and Engineering

31 laboratories and 4 doctoral schools

#### Matter and new materials

22 laboratories & 4 doctoral schools

#### Universe, Environment, Ecology

22 laboratories & 6 doctoral schools

#### Genomics, inter-cellular talking & new therapeutics

86 laboratories 6 doctoral schools

#### College for doctoral training

16 doctoral schools managed by UPMC

3 associated doctoral schools



## 2003 –2004

### Implementation of the LMD (BMD) reform



Main objectives



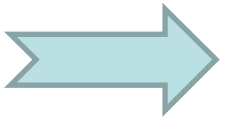
A Top down and bottom-up process



The general organization



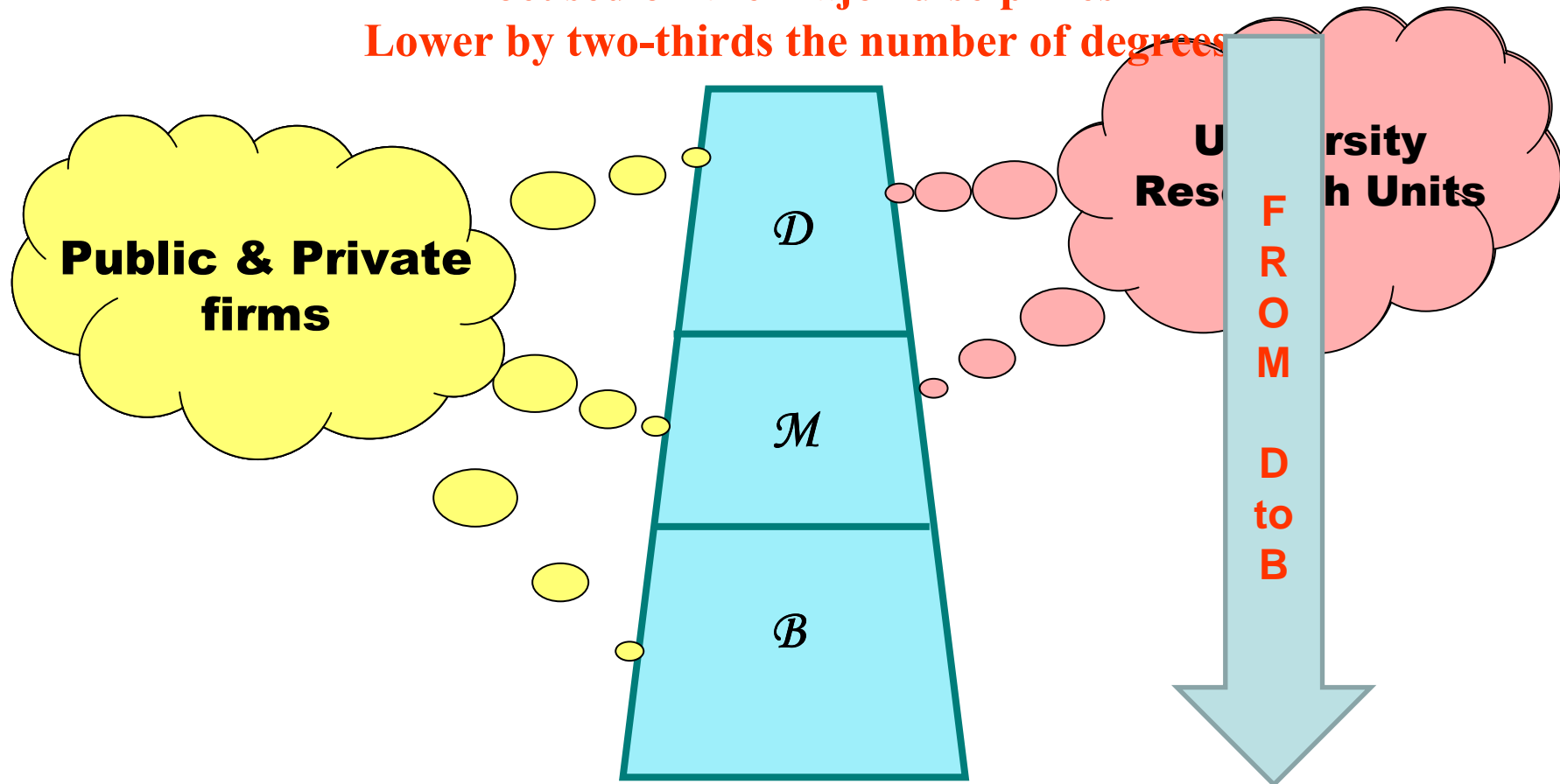
« L'intendance suivra » « Material support will be provided »



The BMD reform induced a new organization of the university

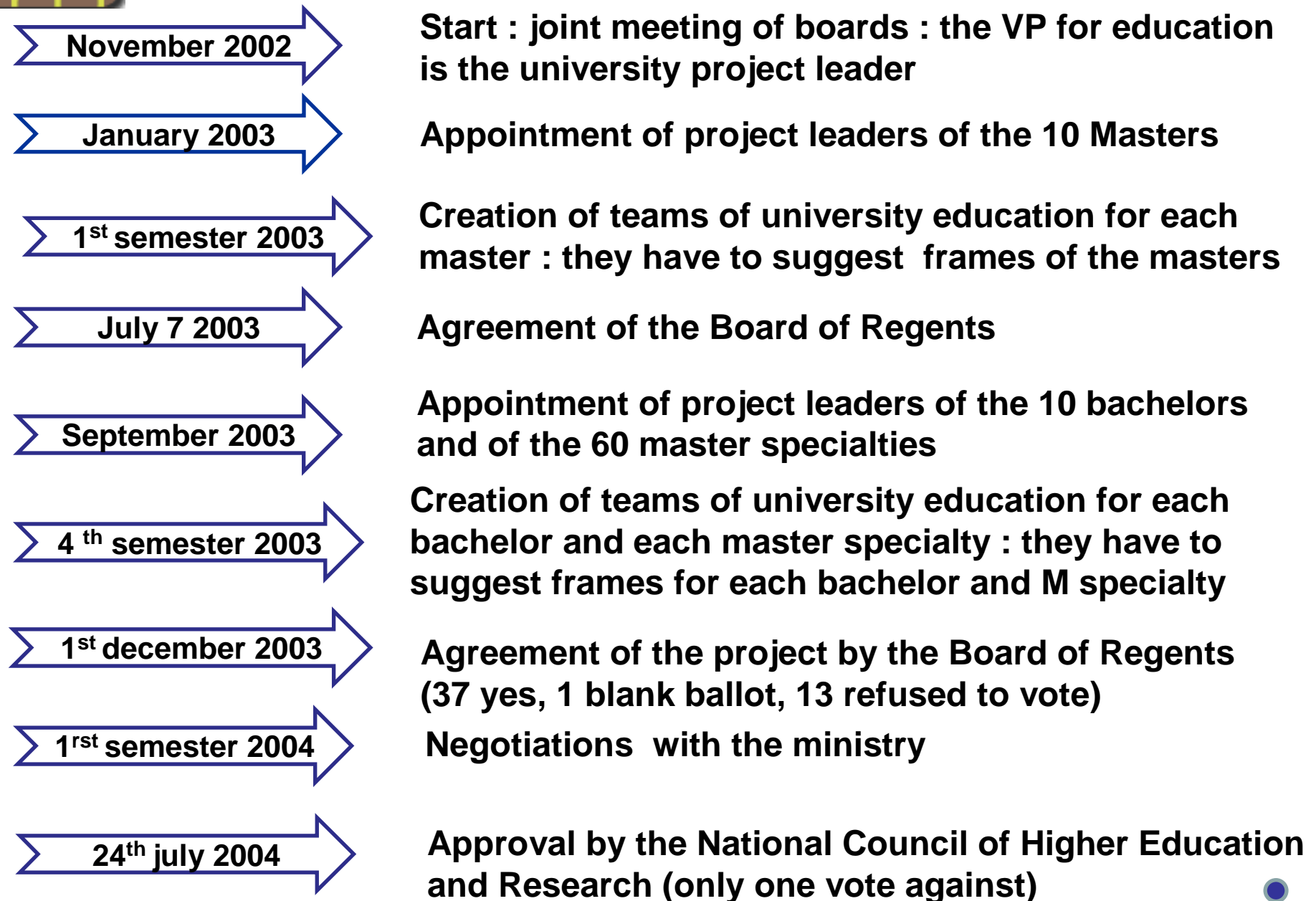


**Only in the scientific sector**  
**Focused on the major disciplines**  
**Lower by two-thirds the number of degrees**

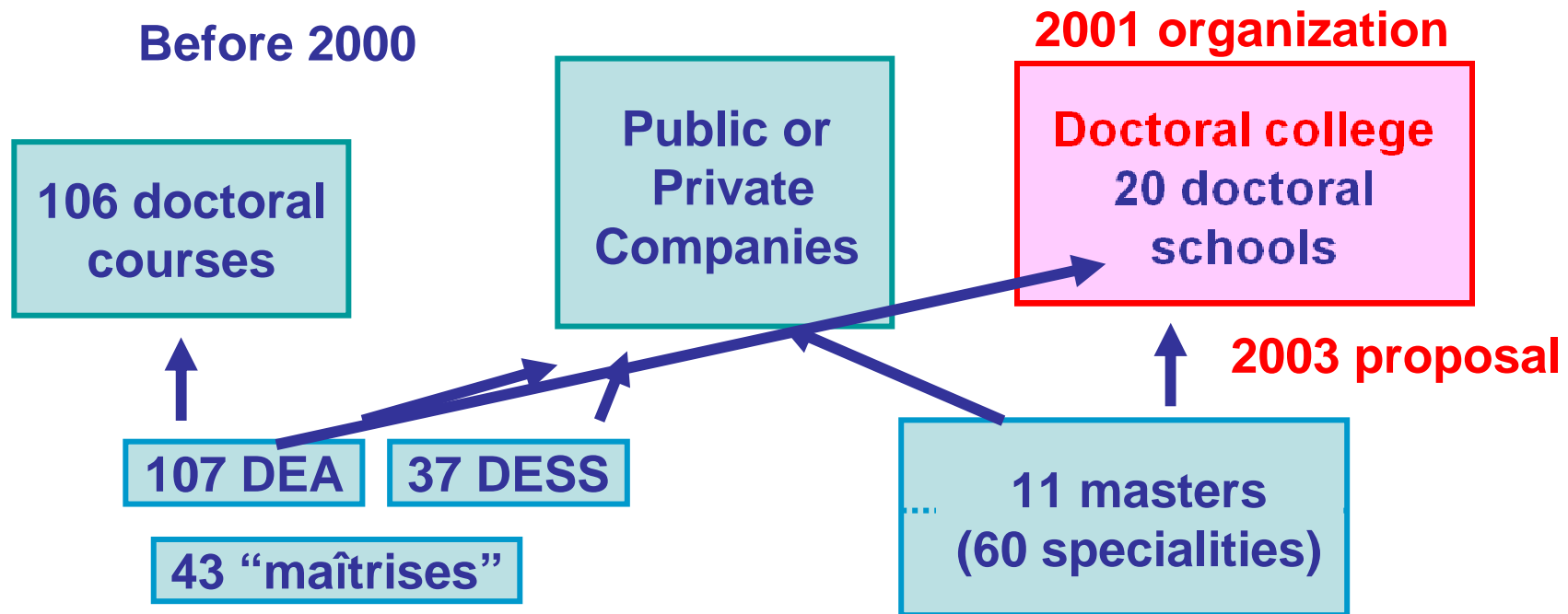


**Strong links between Research labs & Companies**

# A Top-down & down-up procedure



## *Implementation of the Masters & Doctorates at UPMC*



- 107 narrowly-specialized pre-doctoral courses in charge of doctoral enrolment and follow up
- 37 vocational-oriented courses

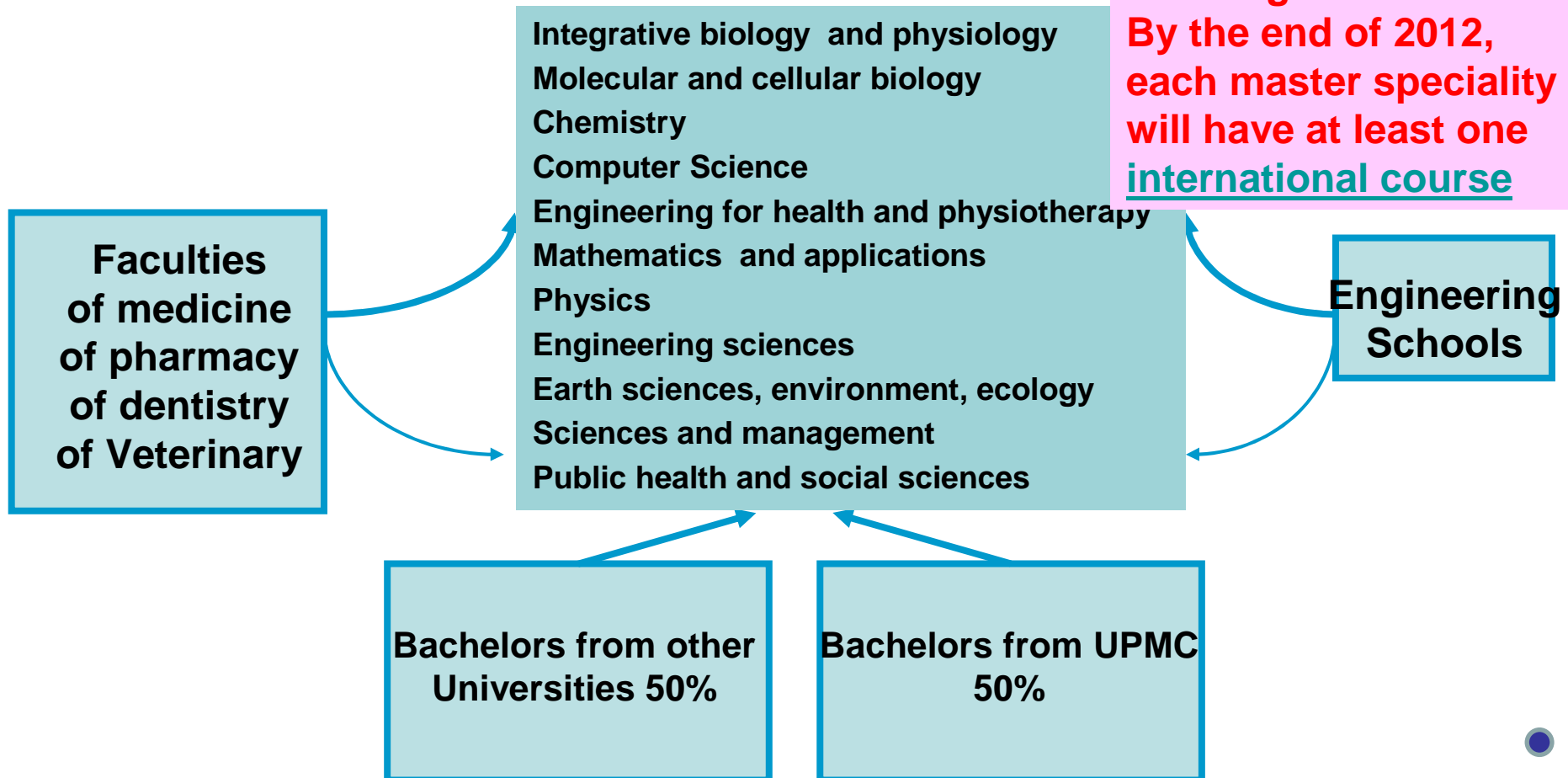
a broader scope of:  
-pre-doctoral courses

greater clarity, flexibility  
and institutional responsibility

*The Master Cycle : 2 years organized in 4 independent semesters*

## 11 Master Programs 5 to 7 Specialities per Program

**International challenge :**  
**By the end of 2012,**  
**each master speciality**  
**will have at least one**  
**international course**



# International programs of Master's degree

- **Master's in chemistry**

**Molecular chemistry:**

**JCEMolChem**

Canada: Université de Montréal and University of Ottawa

- **Master's in earth sciences, environment and ecology**

**Basinmaster**

Germany: Tech. Hochschule

Netherlands: Vrije Universiteit

**Biodiversity and Environment & tropical vegetation**

Belgium : ULB

Africa : U Dakar U Yaoundé

- **Master's in computer science**  
**Bioinformatics, biomathematics and computer modelling**

Belgium: Université Libre de Bruxelles

England: University of Leeds

**UdeM in computer science**

Canada: Université de Montréal

**Biomedical Imaging management**

Singapor NUS, Thaïland AIT

- **Master's in molecular and cellular biology**

**From molecular developmental**

**biology to biomedicine, evolution and systems biology**

Netherlands: Universiteit Maastricht

Portugal: Universidade de Lisboa

Spain: Universitat Pompeu Fabra

**International master's in cell and stemcell biology**

Netherlands: Erasmus Medical Center

Spain: Universitat de Barcelona

- **Immunotechnology and Biotherapy**

Sweden Karolinska Institutet

Argentina U Rosario

Germany : U Hamburg

- **Master's in physics**

**Nanomat: international master's in materials and nanoscience**

Sweden: Uppsala University

- **Master's in engineering science**

**Mechatronic systems for rehabilitation**

Italy: U degli Studi di Brescia

- **Master's in integrative biology and physiology**

**Biology of marine organisms:**

Chile: Pontificia

Universidad Católica de Chile

Spain: Universitat de Barcelona

**Physiology and physiopathology**

Spain: U Complutense de Madrid

Uruguay: U República and Pasteur Institute

**Plant biology**

Belgium: U Gent

**Neurosciences :**

Brain Cognition Behaviour

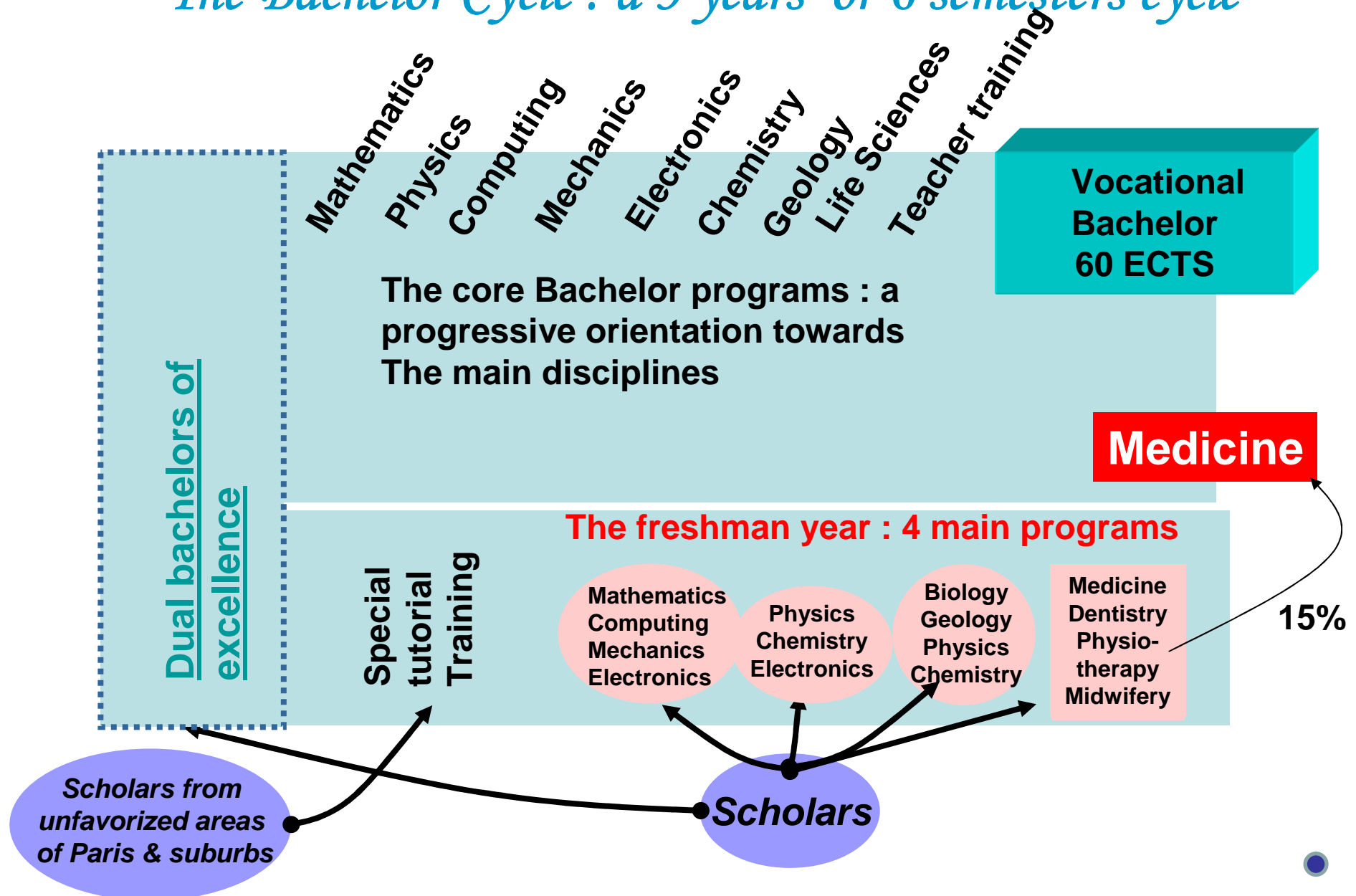
England: UC London

- **Master's in mathematics**

Germany: U Bonn

Spain : U Autonoma Madrid

# The Bachelor Cycle : a 3 years or 6 semesters cycle





# Innovative double bachelors

**Joint education programs a label of excellence**

**Semesters 1 to 4 in each french partner faculties  
Foreign language learning  
Semesters 5 and/or 6 in a foreign University**

**Science and Social sciences (With Sciences Po) 2005**

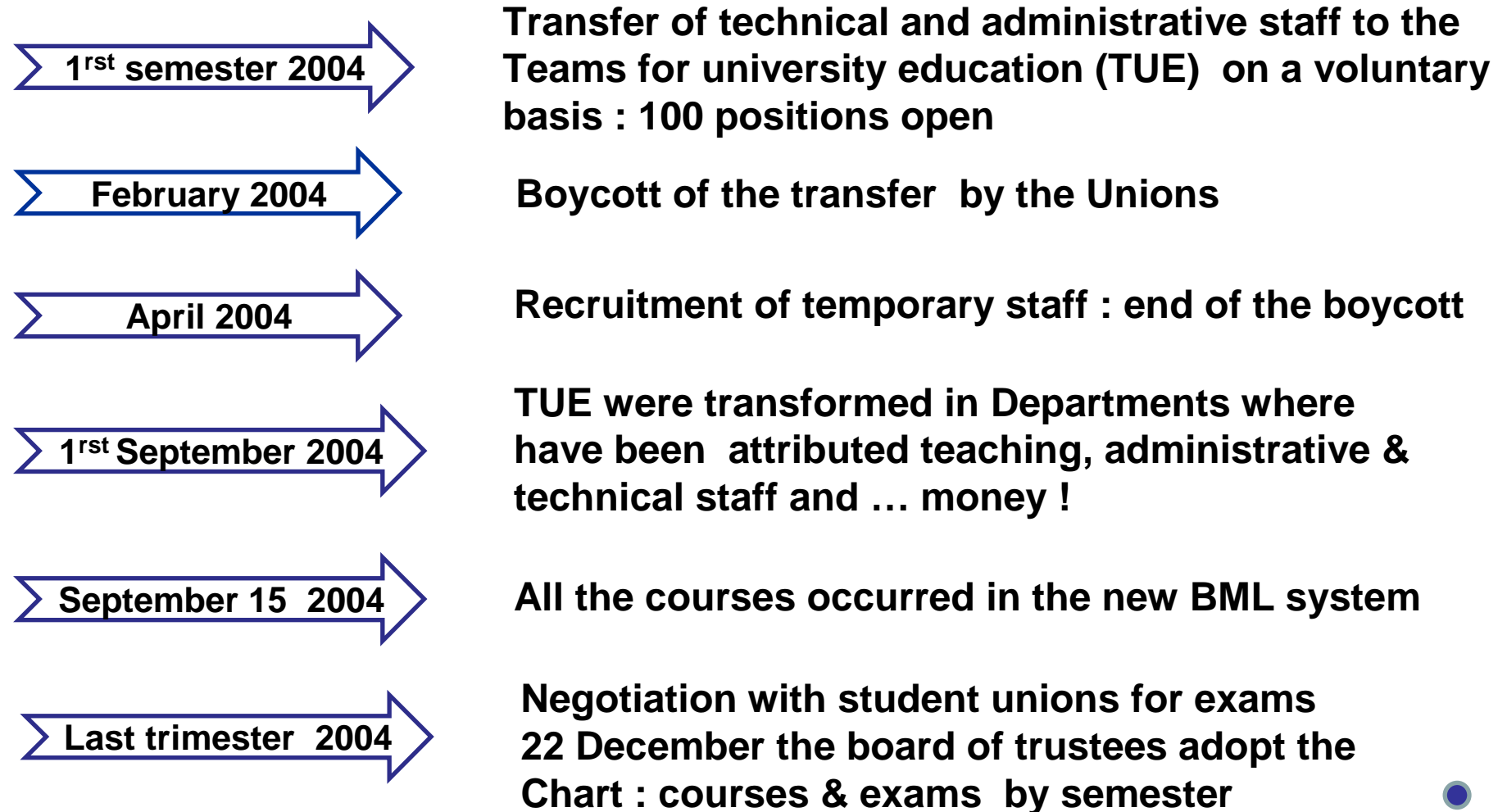
**Science and Musicology (with Paris Sorbonne) 2006**

**Science and History (with Paris Sorbonne) 2007**

**Life sciences and Political sciences (with Sciences Po) 2008**






**Science and Philosophy (with Paris Sorbonne) 2008**

## **Yes : the BMD reform led to a significant restructuring of the management of Education**



## 2005 –2006

### A new organization induced by the reform

-  New management of training
-  Reorganization of research
-  Reorganization of the Faculties
-  A strong governance by the presidential team
-  In March 2006, the 1<sup>st</sup> Vice President was elected President

# **Establishment of an Executive Vice President for Training and Carrier Advice**

## **Establishment of Training Departments**

- lead by a director appointed by the President of the university**
- with a secured budget directly provided by the presidency of the university**
- creation of pedagogic teams units for learning**

## **Establishment of an office at the presidency for Training and Carrier Advice**

- under the supervision of the Vice President**
- in charge of evaluation procedures**
- in charge of the survey of job integration of the students**
- in charge of the survey of Students' mobility**
- which prepare the training contract with the State**

# **Establishment of an Executive Vice President for Research & innovation**

**Creation of Research Centers, Institutes and of Federation of Research Labs**  
lead by a director appointed by the President of the university  
with a secured budget directly provided by the presidency of the university  
creation of research units which have also their budget secured

**Establishment of an Office at the presidency for Research and Innovation**  
under the supervision of the Vice President  
in charge of the supervision of the research teams  
in charge of evaluation procedures  
in charge of preparing the research contract with the State

# Reorganization of the 4 research domains

- All domains are inter-disciplinary subject groups
- In 42 institutes, research centers or big labs and 90 other research units

**Modeling and  
engineering**

**22 labs**

**4 doctoral  
schools**

**Matter, energy  
and universe**

**41 labs**

**7 doctoral  
schools**

**Living Earth &  
environment**

**27 labs**

**3 doctoral  
schools**

**Life sciences  
and health**

**42 labs**

**6 doctoral  
schools**



# Implementation of Faculty organization

At UPMC, the faculties are principally devoted to the day to day management

UPMC has adapted the number and the perimeter of its faculty:

- to its Training organization at the Bachelor and Master level
- to its Research organization
- UPMC also established Internal Institute of Excellence for special needs

## Before 2001

- 4 medical faculties
- 9 scientific faculties
- 2 Engineering Schools
- 4 Internal Institute of excellence
- 3 Marine Stations
- Henri Poincaré Institute
- 2 University Departments
- Long Life learning
- Department for primary cycle

## After 2006

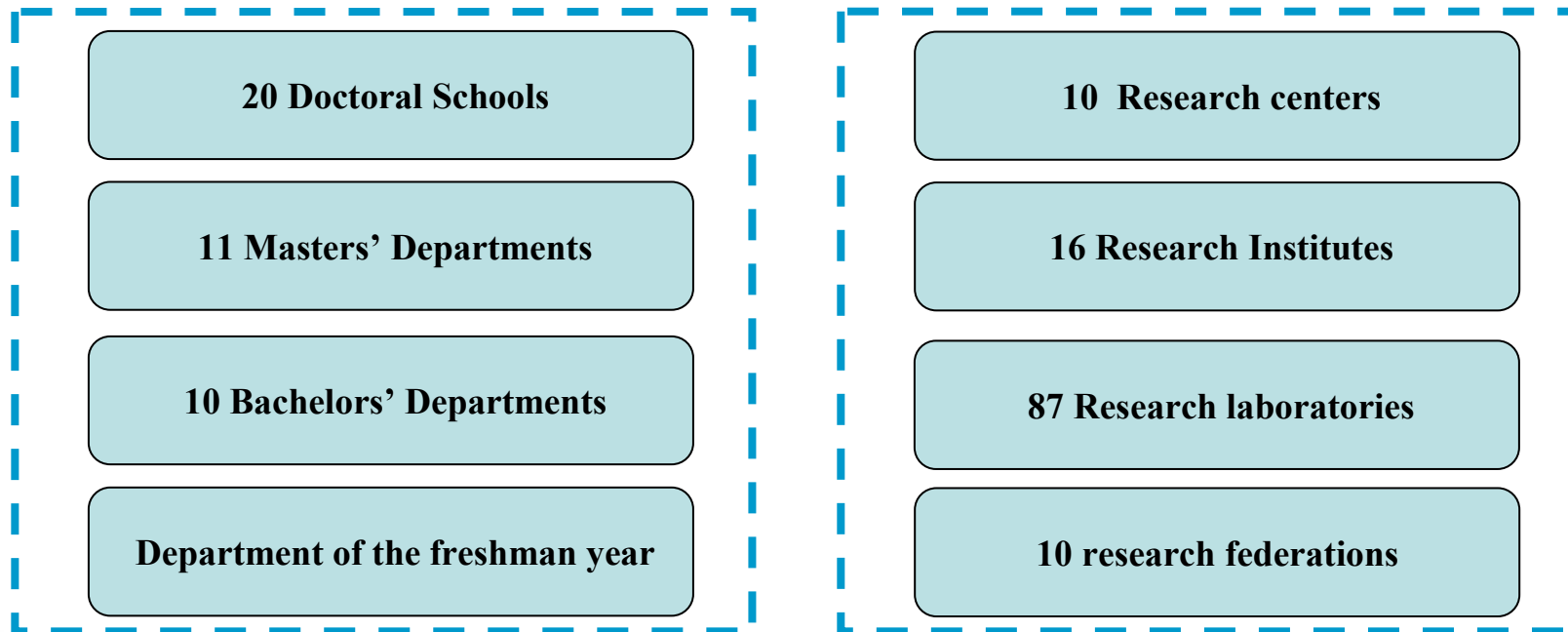
- 1 medical faculty
- 6 scientific faculties
- 1 Polytechnic School
- 6 Internal Institute of excellence
- 3 Marine Stations
- Henri Poincaré Institute
- Institute for doctoral training
- Paris Astrophysics Institute
- 2 University Departments
- Long Life Learning
- Trans-disciplinary Training

A 2 years struggle :  
unification of UPMC  
medical cursus

## *A new articulation between the presidency and operational structures*

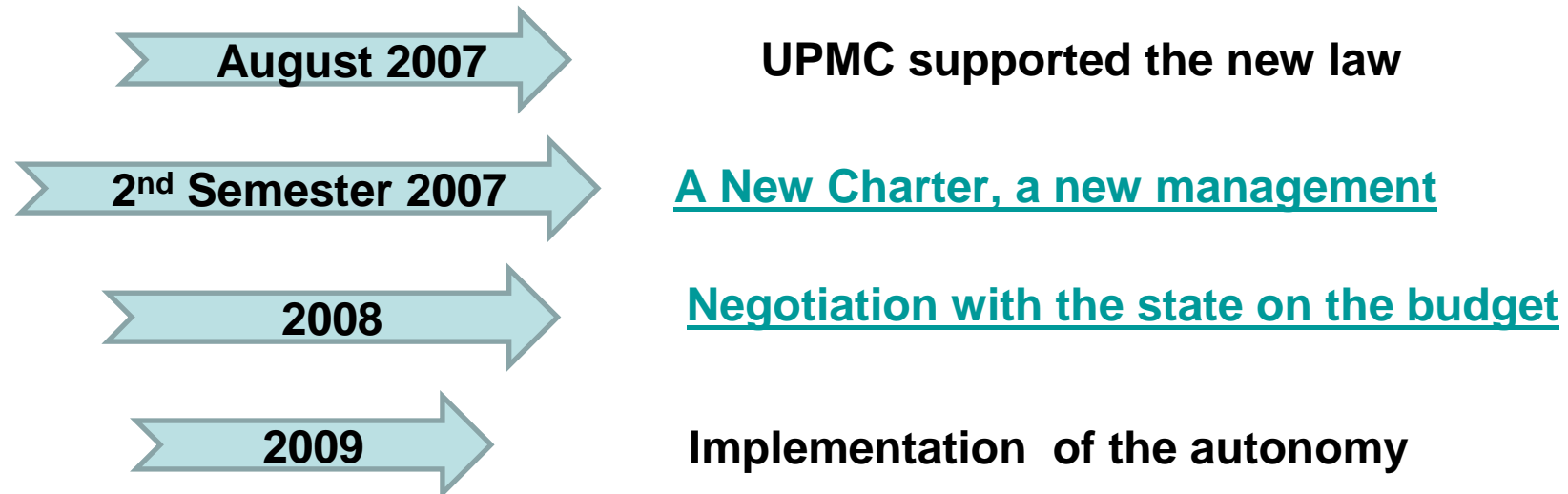


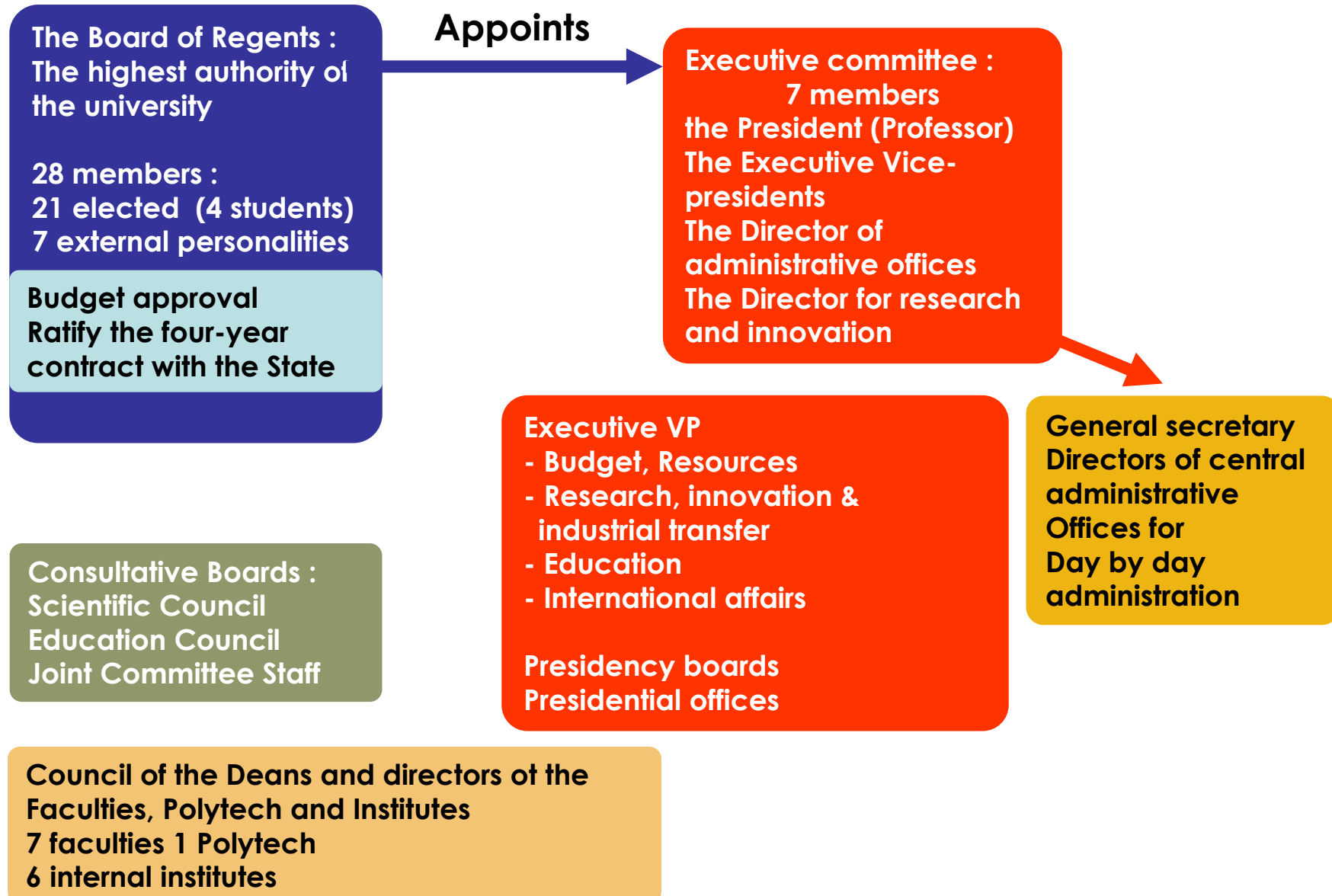
### *Direct relationship without the faculty filter*



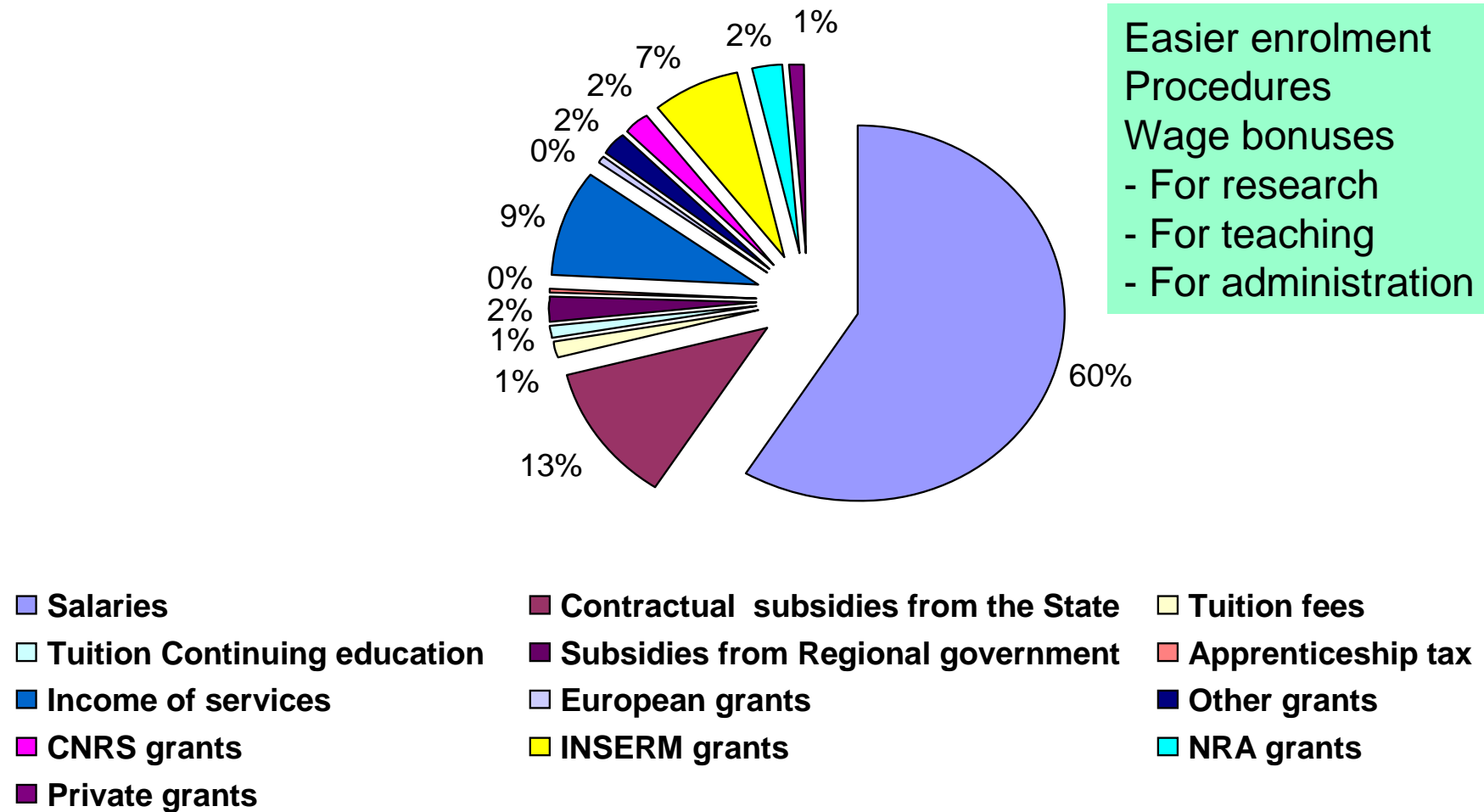
## 2007 - 2009

### Towards full autonomy





## 2009 global budget : 480 M€



## Some results



The number of students have increased



Loss of publication have decreased



The budget have increased



Student mobility have increased



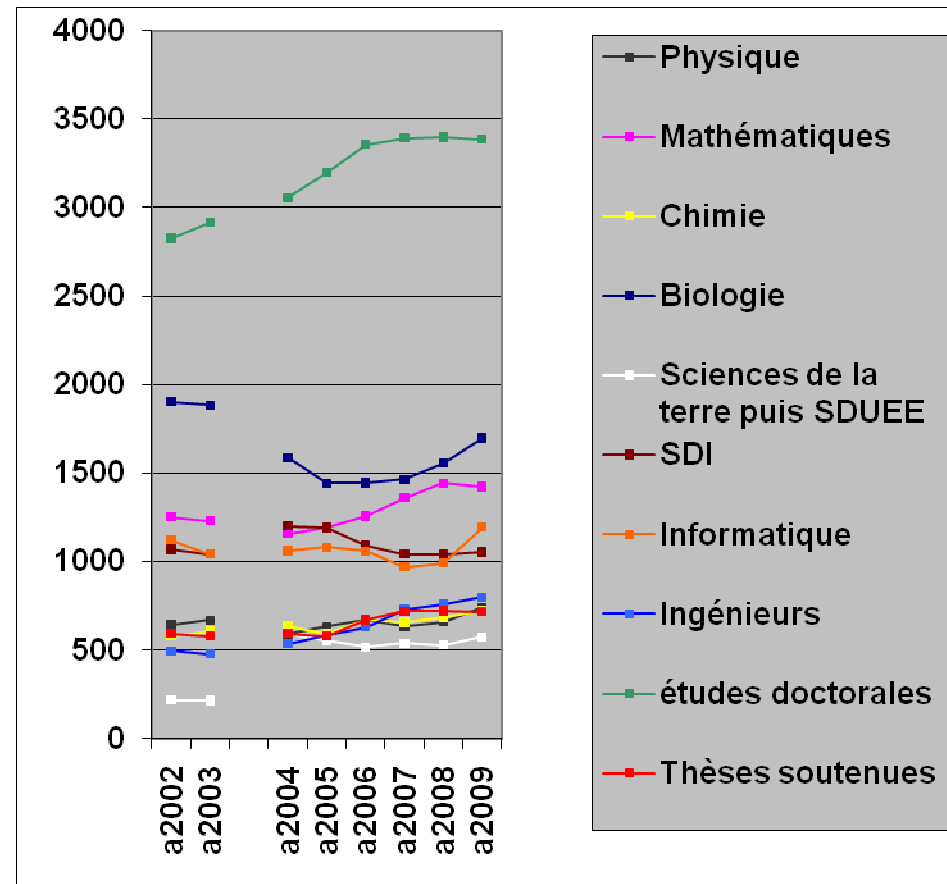
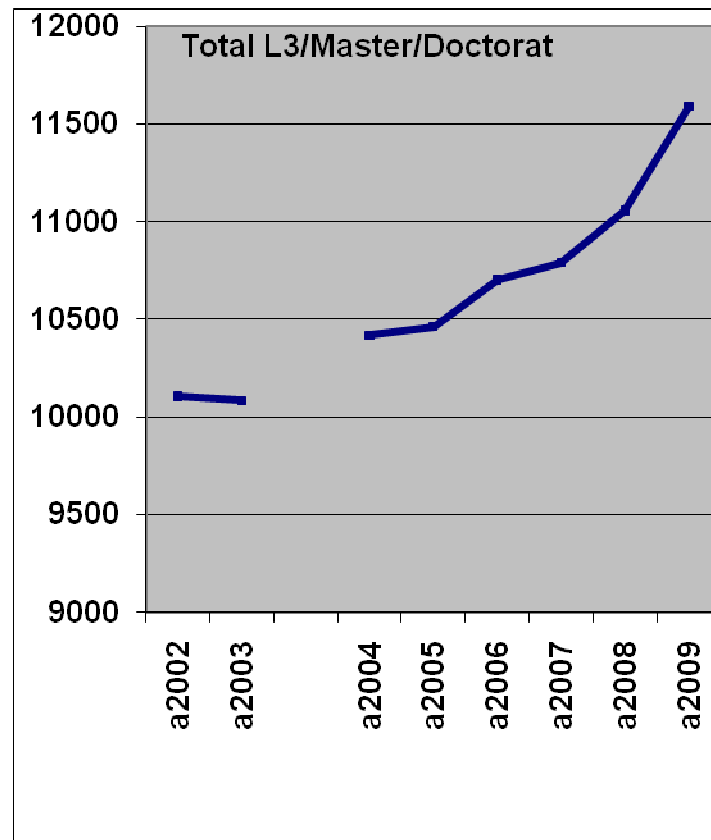
A lot of spin off have emerged



The new campus is emerging

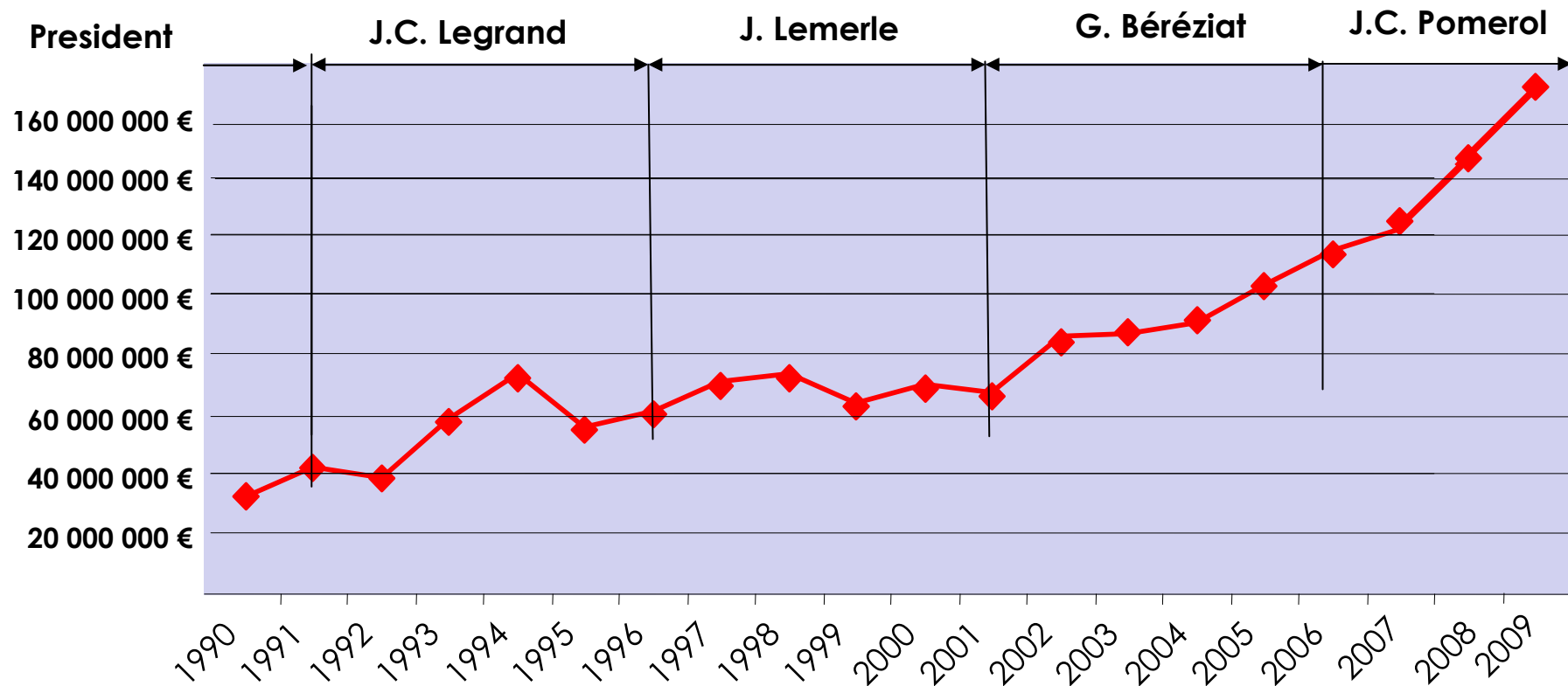


# Number of students from y 3 to 8

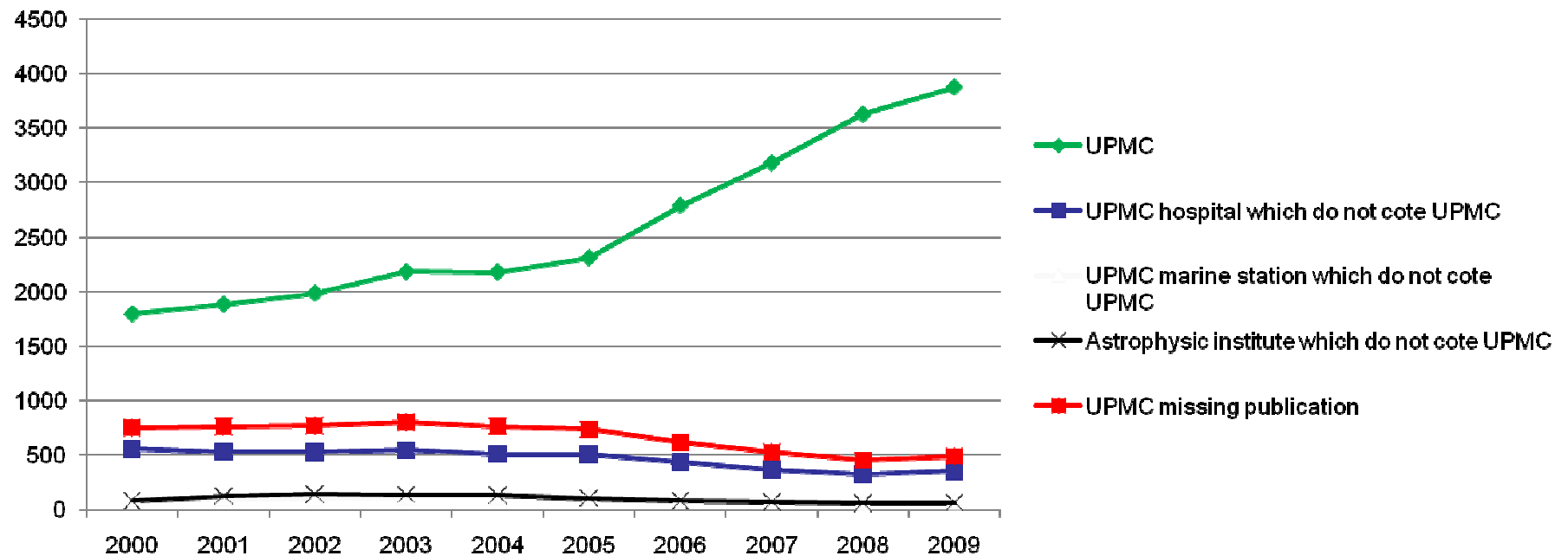


# UPMC annual budget

(Without salaries)



# Scientific papers in English language



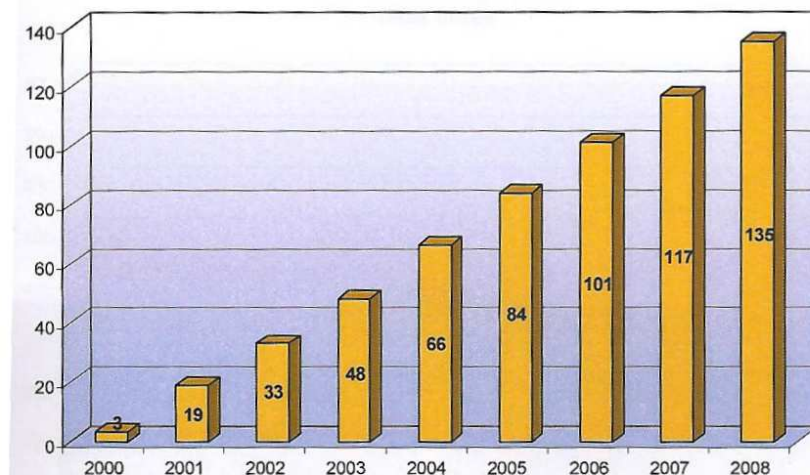
# Outgoing mobility

Programs	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010
<b>ERASMUS</b>	<b>39</b>	<b>48</b>	<b>59</b>	<b>57</b>	<b>57</b>	<b>77</b>	<b>73</b>	<b>106</b>	<b>146</b>
<b>USA</b>			<b>6</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>8</b>	<b>11</b>	<b>22</b>
<b>ARGENTINE</b>							<b>2</b>	<b>1</b>	<b>4</b>
<b>BRASIL</b>									<b>1</b>
<b>CHILI</b>			<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>5</b>	<b>8</b>
<b>JAPAN</b>			<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>3</b>
<b>SINGAPOR</b>			<b>0</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>6</b>	<b>5</b>
<b>TAIWAN</b>									<b>2</b>
<b>CREPUQ (QUEBEC)</b>	<b>2</b>	<b>3</b>	<b>16</b>	<b>9</b>	<b>2</b>	<b>6</b>	<b>3</b>	<b>6</b>	<b>17</b>
<b>MONTREAL</b>							<b>2</b>	<b>10</b>	<b>14</b>
<b>OTTAWA</b>							<b>1</b>		<b>3</b>
<b>BRITISH COL</b>									<b>1</b>
<b>TOTAL programs</b>	<b>41</b>	<b>51</b>	<b>81</b>	<b>76</b>	<b>69</b>	<b>94</b>	<b>94</b>	<b>149</b>	<b>226</b>

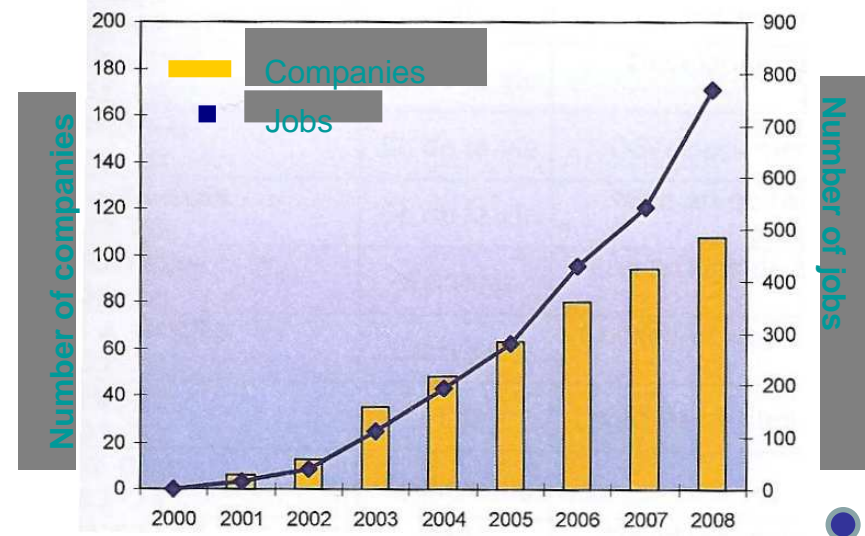
In partnership with University Paris-Dauphine and Ecole Normale Supérieure

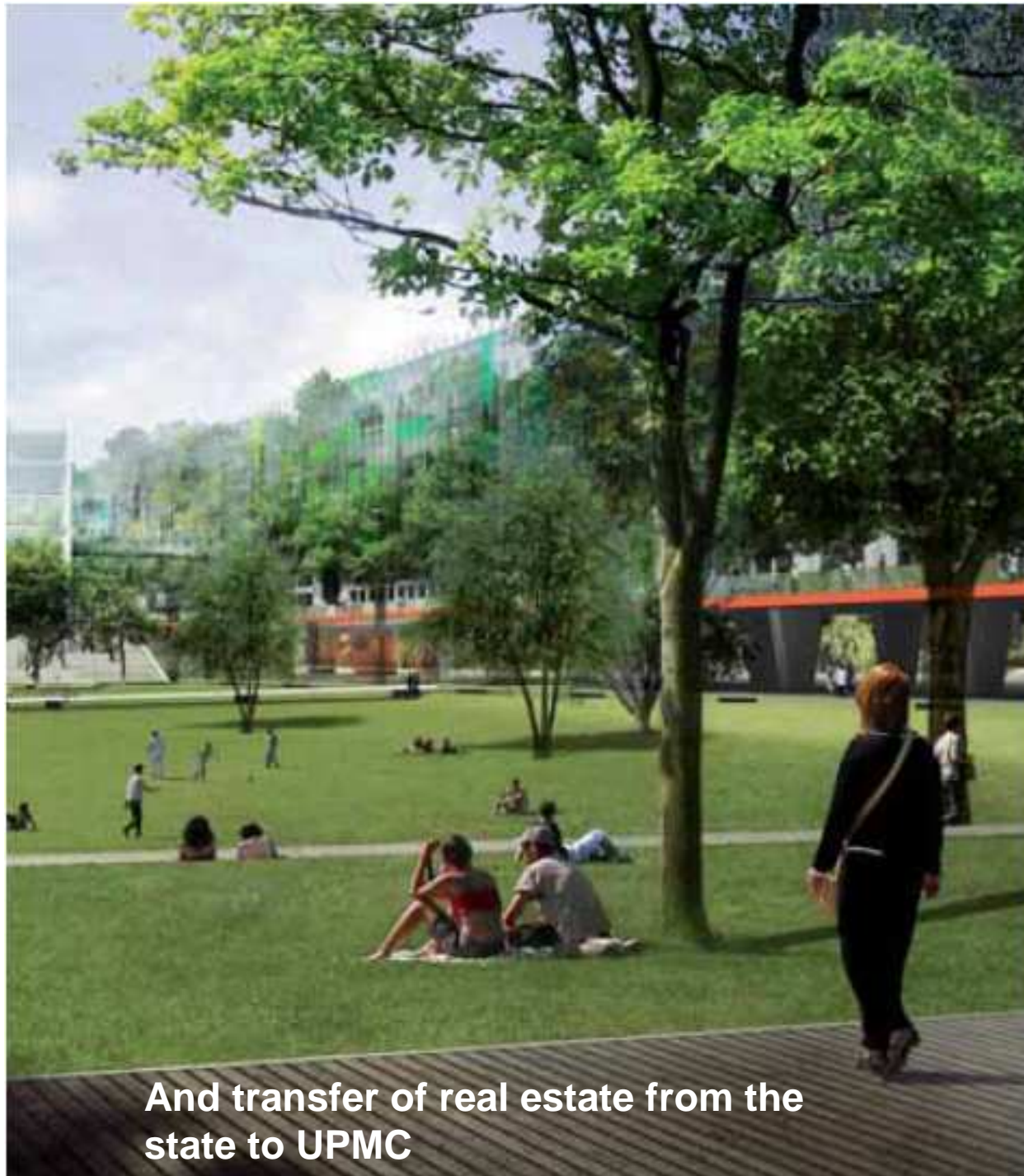
- **130** projects kick-started since the end of 2000, 100 still active
- **105** created companies
- more than **800** jobs generated
- more than **70** million euros of private fund raised or capital-raised by start-up companies

Jobs created



companies and jobs created



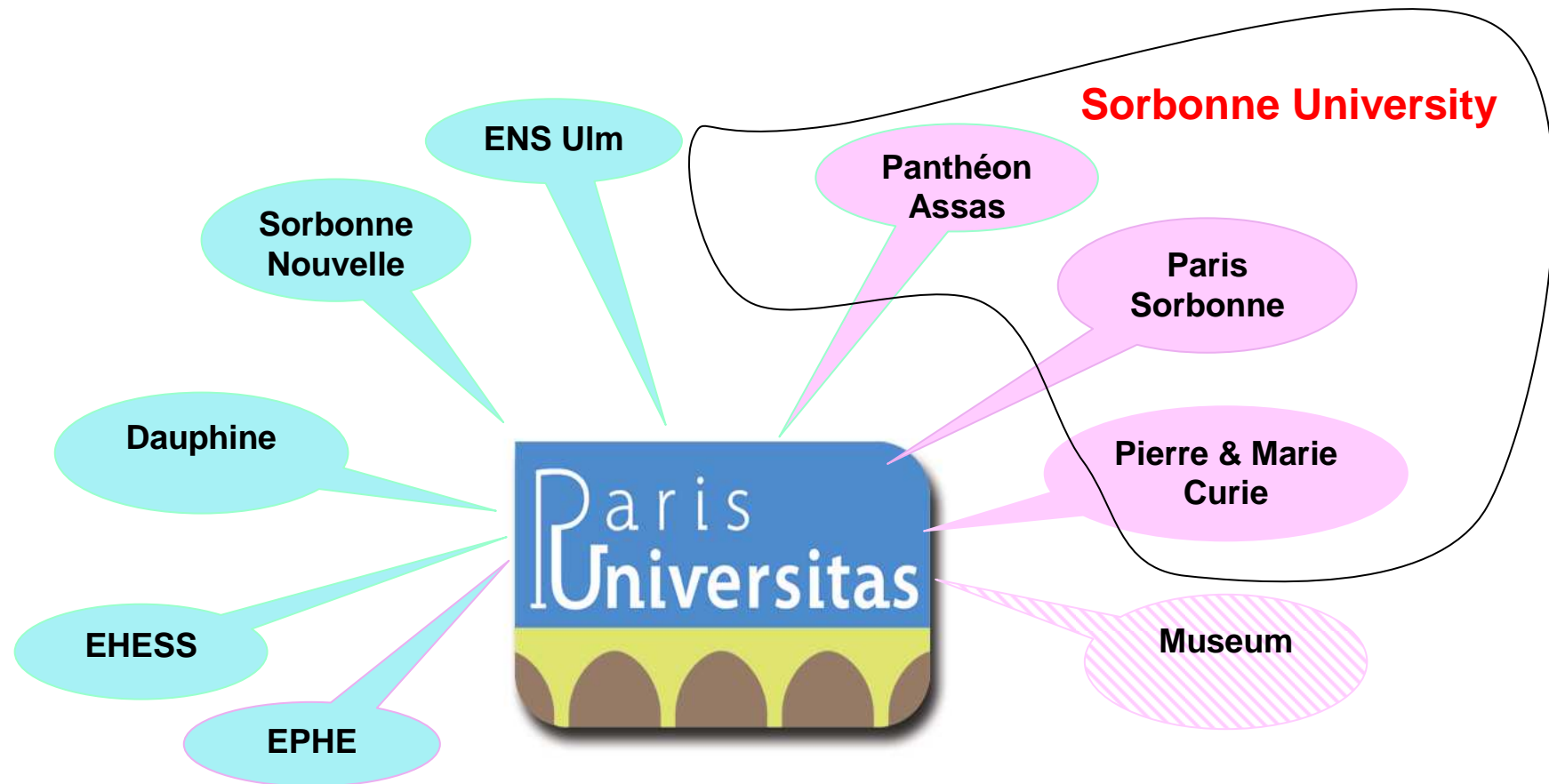


And transfer of real estate from the  
state to UPMC



# 2010

## *From UPMC to Sorbonne University*





Panthéon Assas :  
Pt Louis Vogel



Paris Universitas  
DG Gilbert Béréziat

Paris Sorbonne  
Pt Georges Molinié

Pierre & Marie Curie  
Pt Jean-Charles Pomerol



*Against tyranny Liberty always win*

